

BEFORE THE  
POSTAL REGULATORY COMMISSION  
WASHINGTON, D.C. 20268-0001

MAIL PROCESSING NETWORK  
RATIONALIZATION SERVICE CHANGES, 2012

DOCKET No. N2012-1

**RESPONSES OF POSTAL SERVICE WITNESS MARTIN TO  
INTERROGATORIES OF THE PUBLIC REPRESENTATIVE**  
(PR/USPS-T6-1 THROUGH 5, 7 AND 8, 10 AND 11)

The United States Postal Service hereby provides its responses to the above-referenced interrogatories of the Public Representative dated December 21, 2011. Each interrogatory is stated verbatim and is followed by the response. Interrogatory PR/USPS-T6-9 has been redirected to Postal Service witness Bradley (USPS-T-10). The responses to interrogatories PR/USPS-T6-6 and 12 are forthcoming.

Respectfully submitted,

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**PR/USPS-T6-1.** Please refer to page 6 of your testimony, which states “Changes will promote efficiency in the transportation network.” Please confirm that the term “efficiency” as used here refers to a reduction in excess capacity in the mail processing and transportation networks. If not confirmed, please explain.

**RESPONSE:**

Confirmed.

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**PR/USPS-T6-2.** Please refer to page 6 of your testimony which states, “A reduction in the number of processing facilities in the postal network will significantly reduce the number of individual links in the transportation network.” On page 6 you also provide a hypothetical example in Figure 1.

- a. Please confirm that the proposed network rationalization always assumes a reduction of individual links in transportation network. If not confirmed, please explain and provide an example.
- b. Does the proposed network rationalization consider the possible need for new links between processing facilities? If not, please explain.
- c. In the hypothetical example (Figure 1) all processing facilities are linked to each other. If one assumes a scenario in which not all facilities are linked to each other, could it alter your conclusion concerning the significant reduction in “the number of individual links in the transportation network?” Please explain in detail.

### **RESPONSE:**

- (a) Confirmed.
- (b) Yes.
- (c) No. I acknowledge that if there are fewer links between the five plants in Figure 1 (USPS-T-6 at 7) in the hypothetical current network, there is less potential for a reduction in the number of links between those plants as a result of network rationalization. However, Figures 1 and 2 (USPS-T-6 at 7 and 8) are provided for illustrative purposes only. I expect a significant reduction in transportation links in the network because we have the potential to deactivate approximately 50 percent of processing facilities in the current network. As a result, I anticipate a significant reduction in plant-to-plant links in the transportation network.

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**PR/USPS-T6-3.** Please refer to page 8 of your testimony which states: “This tension illustrates that the opportunity to optimize transportation in the new network will involve both reductions in trips and some increase in volume, hence capacity utilization, on remaining trips[.]”

- a. Please define optimization as it is used in this context.
- b. Please identify any calculations that estimate the “increase in volume,” and provide those calculations.

### **RESPONSE:**

- (a) The sentence quoted from page 8 of my testimony contains the phrase “optimize transportation.” This phrase refers to the rationalization of the transportation network in a manner that will increase efficiency in the network. Please see my response to PR/USPS-T6-1.
- (b) No such calculations were filed with my testimony. The trip-specific, capacity-utilization data contained in the “Plant to Plant Trips” spreadsheet in library reference USPS-LR-N2012-1/11 shows that there is excess capacity throughout the plant-to-plant transportation network. I use these data to determine which routes can absorb the volumes from routes that are eliminated.

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**PR/USPS-T6-4.** Please refer to page 9 of your testimony which states, “Additionally, the proposed service standards and the corresponding expansion of current mail processing windows will provide the Postal Service with more time to accumulate mail at an origin processing plant for eventual transport to a destination processing plant. As a result, the Postal Service will be able to increase the capacity utilization of trucks that operate between plants. Such increases will have a suppressive effect on the number of trips between the remaining plants because the Postal Service will be able to schedule fewer trips between the remaining plants *than would otherwise be required* under a more restrictive window to ensure that mail reaches the destination plant by the applicable critical entry time.”

- a. Please provide calculations showing the current capacity utilization of trucks, and provide an estimate of an acceptable level of capacity utilization.
- b. Please confirm that there is a limit to the ability to increase “the capacity utilization of trucks that operate between plants”? If confirmed, please provide an estimate of how that limit could be calculated.
- c. Does the rationalization plan consider possible increases in trip length? If so, please provide the data and calculations. If not confirmed, please explain.

### RESPONSE:

- (A) Truck capacity utilization is calculated from data that are uploaded to our transportation databases (Surface Visibility or Transportation Information Management Evaluation System (“TIMES”)). When mail is presented to the outbound dock for loading onto vehicles, each mail handling unit (e.g., a pallet or wheeled cart) has a barcode that an employee scans. When that barcode is scanned, volume data for that mail handling unit are uploaded to the transportation database. A software program then calculates the capacity utilization percentage for each trip based on the scanned data. This program uses an algorithm that compares the volume data from the scanned mail handling unit to the volume for the truck/trip and derives the percent utilization of the truck/trip. The capacity utilization percentages for the trips included in my analysis are set forth in the spreadsheet “Plant to Plant Trips” in USPS-LR-

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**RESPONSE TO PR/USPS-T6-4 (CONT.):**

N2012-1/11, under Column L ("Utilization"). These percentages reflect an average utilization over a 14 day period in early October 2011. The Postal Service has established a capacity utilization target of 70 percent.

- (b) Confirmed. Capacity utilization is limited based on the availability of volume on the transportation vehicle. Please see my response to part (a) above. When a truck has reached 100 percent capacity, the capacity of the truck is fully utilized. When the transportation database shows that the mail volume exceeds the capacity of a transportation vehicle, my office works with local officials to determine the appropriate response to ensure that the excess volume can be transported to its destination. This could require the addition of a trip to the route.
- (c) Confirmed. Data and calculations on increases in trip length have not been finalized and I did not rely on such data in preparing my testimony for this docket.

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**PR/USPS-T6-5.** Please refer to pages 10 and 11 of your testimony, specifically Figures 3 and 4. On page 10 you also state: "By reducing the number of plant-to-Post Office links within a defined geographic area and collapsing two service areas into one, the Postal Service will be able to reduce the number of operating miles within that area. Additionally, an expanded mail processing window, combined with a reduction in the number of plants, would enable the Postal Service to decrease the number of surface transportation trips required to service a particular area."

- a. Are "the number of operating miles" identified in Figure 4 necessarily, in all circumstances, less than in Figure 3? Please confirm.
- b. Would the Postal Service, in all cases, be able to decrease the number of surface transportation trips?

**RESPONSE:**

- (a) No. As information, operating miles are determined by multiplying the number of trips by the miles traveled (trips x miles = operating miles). There are no operating miles identified in Figures 3 and 4. Based on the "Plant to Post Office" spreadsheet in USPS-LR-N2012-1/11, I anticipate a reduction in operating miles due to the deactivation of certain processing operations combined with an expanded mail processing window that will enable the Postal Service to reduce the amount of trips within a particular service area.
- (b) No. Please see my response to part (a) above.

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**PR/USPS-T6-7.** Please refer to page 14 of your testimony, which states “The consolidation of mail processing facilities and the corresponding realignment of the transportation network will result in the diversion of First-Class Mail volumes with a three-day service standard from surface transportation to air transportation.” On page 2 the testimony reads: “First-Class Mail, Priority Mail, and Express Mail intended for carriage and delivery within the continental United States and between the contiguous United States and non-contiguous parts of the domestic service area are transported via air when necessary to achieve the applicable service standards.”

- a. Please provide the percentage of First-Class Mail that is currently transported using surface modes.
- b. Please, provide the percentage of First-Class Mail that will be transported using surface modes if the Postal Service implements its plan.

**RESPONSE:**

- (a) The percentage of First-Class Mail that is currently transported using surface modes is approximately 85 percent.
- (b) The percentage of First-Class Mail that is expected to be transported using surface modes in the rationalized network is approximately 82 percent.

The source for these data is library references USPS-LR-N2012-1/25 and USPS-LR-N2012-NP7.

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**PR/USPS-T6-8.** Please refer to page 15 of your testimony, which states that the increase in the volume of First-Class Mail requiring air transportation was estimated “by assessing the volume of First-Class Mail on current surface transportation lanes that would require air transportation to meet the 8:00 a.m. critical entry time on the day prior to delivery.” Please provide and explain the data and calculations used to derive the estimated volume.

### **RESPONSE:**

The responsive data are contained in the following files in library references USPS-LR-N2012-1/25 and USPS-LR-N2012-NP7.

“Current FCM Modes”

“Proposed L201 to SCF Drive Time”

“Proposed FCM Modes”

To determine the mode of transportation for First-Class Mail (FCM) between the facility that processes the origin 3-digit ZIP Code FCM letters and Sectional Center Facility (SCF) that processes the destination 3-digit ZIP Code FCM letters (“OD pair”), the distances (d) between the OD pairs are divided by a fixed speed of travel (46.5 miles per hour) to determine travel time. PC Miler batchpro version 20.1 was used for road mileage. PC Miler batchpro is a software that allows for the generation of road mileage estimates between any two points. The travel time is then adjusted to account for time zone changes between the origin and destination facilities. For example, if mail is traveling from a facility in the Eastern Standard Time zone to one in the Central Standard Time zone, the travel time would decrease by 1 hour. The proposed adjusted travel times between the OD pairs is provided in the spreadsheet “Proposed L201 to SCF Drive Time.” If the adjusted travel time between facilities is less than 24 hours, the

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### **RESPONSE TO PR/USPS-T6-8 (CONT.):**

proposed mode for the FCM for the OD pair is surface. If the adjusted travel time between facilities is more than 24 hours, the proposed mode for the FCM for the OD pair is air. The results of this operation are provided in the spreadsheet "Proposed FCM Modes."

I have identified potential changes in the mode of transportation for particular OD pairs, and the affected volumes, by comparing the data in the "Current FCM Modes" spreadsheet with data in the "Proposed FCM Modes" spreadsheet as follows:

1. For each 3-digit to 3-digit ZIP Code pair, if the current mode is air and the proposed mode is surface, then FCM volume for that OD pair will be diverted from air to surface. The FCM volumes for these OD pairs are aggregated to determine the total volume of FCM that will be diverted from air to surface.
2. For each 3-digit to 3-digit ZIP Code pair, if the current mode is surface and the proposed mode is air, then FCM volume for that OD pair will be diverted from surface to air. The FCM volumes for these OD pairs are aggregated to determine the total volume of FCM that will be diverted from surface to air.
3. The total volume of FCM that will be diverted from air to surface is subtracted from the total volume of FCM that will be diverted from surface to air.

To convert the volume into annual weight, the change in air volume was converted from average daily volume (ADV) into annual volume by multiplying the volume by 302 processing days. The annual volume was converted to weight using a factor of .047LB/piece.

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**RESPONSE TO PR/USPS-T6-8 (CONT.):**

The results of these calculations are provided in USPS-LR-N2012-1/11 in the spreadsheet titled "Air Transportation Volume Diversion Data."

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**PR/USPS-T6-10.** Please refer to USPS-LR-11, Transportation, File: Preface.doc, where you state that mail volumes associated with origin/destination (o/d) plant pairs where distance between them would take more than 24 surface transportation time, diverted their First Class volume to air transportation. You also state that one may identify additional routes where mail is diverted from highway to air transportation by comparing the current First-Class Mail transportation mode matrix with “the hypothetical transportation mode matrix contained in USPS-LR-N2012-1/8, sponsored by witness Williams (USPS-T-1).”

- a. Please confirm that none of the files in USPS-LR-N2012-1/8 contain the current or proposed o/d pairs by travel time and FY2010 First Class RPW volume.
- b. If confirmed, please provide source data in machine-readable format showing each o/d pair in the current network and the proposed network, with the estimated highway time and Fy2010 First Class RPW volumes for each o/d pair.
- c. If not confirmed, please explain how the files in USPS-LR-N2012-1/8 can be used to derive the information requested in “b”.

### **RESPONSE:**

- (a) Confirmed.
- (b) The responsive data are contained in library references USPS-LR-N2012-1/25 and USPS-LR-N2012-NP7.
- (c) N/A

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**PR/USPS-T6-11.** Please refer to page 12 of your testimony which states, "I analyzed a subset of routes in the network to identify operating miles that could be eliminated in the rationalized mail processing environment.... In so doing, I analyzed whether certain trips with low utilization on existing routes could be eliminated, thereby reducing operating miles, without compromising the Postal Service's ability to move existing mail volumes. Based on this analysis, I estimate that the number of operating miles in the current network could be reduced by approximately 13.68 percent in the rationalized network.

- a. Please refer to USPS-LR-N2012-1/11, Transportation Spreadsheets LR.xls, Worksheet: "Plant to Post Office." Please reconcile the average percentage reduction shown as 14.45 percent and the 13.68 percent you refer to in your testimony. Please explain whether the percentage reduction shown in the spreadsheet was limited to the routes in the example, and 13.68 percent is the reduction that would occur if you applied the method used in the spreadsheet to the entire universe of routes.
- b. Please provide the utilization rate, below which, a route could be eliminated.

### **RESPONSE:**

- (a) The source for the 14.45 percent figure that appears in part (a) of this interrogatory is unclear. The 13.68 percent reduction shown in the Plant to Post Office worksheet (USPS-LR-N2012-1/11) is the same as the percentage figure provided on page 12 of my testimony. The percentage reduction shown in the spreadsheet is based on an assessment of the operating miles that could be eliminated through the consolidation of processing operations at plants that are being studied under the AMP process. It is unknown whether the percent reduction in operating miles, estimated at 13.68 percent, is the same as the estimated percent reduction that would be derived if the method used in the spreadsheet is applied to data from all processing operations for which an AMP study is being performed in connection with network optimization. It is highly likely that such percentage figure would not be exactly 13.68 percent.

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**RESPONSE TO PR/USPS-T6-11 (CONT.):**

- (b) A route is comprised of a single trip or series of trips. The utilization rate of less than 50 percent on a particular trip/truck is flagged to determine if a trip, a series of trips, or an entire route, can be eliminated.